A CLINICAL STUDY OF NASOPHARYNGEAL MASSES

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ABSTRACT : *Out of 36511 patients attending the ENT OPD of R. G. Kar Medical College & Hospital, Kolkata, in one year 0.08% patients were found having nasopharyngeal mass.*
30 cases of nasopharyngeal mass were studied. The peak incidence of nasopharyngeal mass was in the age group between 11 to 20 years (40%). The incidence in males (73%) was more than females(27%). The maximum incidence was found among students (74%). Commonest nasopharyngeal mass was antrochoanal polyp (30%). Next common masses were adenoids (23%),juvenile angiofibroma (20%) and nasopharyngeal carcinoma (13%). Nasal obstruction was the main presenting symptom(83%) followed by epistaxis (40%).

Key Words : Nasopharyngeal mass, Antrochoanal polyp, Adenoids, Juvenile angiofibroma, Nasopharyngeal carcinoma, Emb. Rhabdomyosarcoma.

INTRODUCTION

Nasopharyngeal mass is not an uncommon clinical entity. Many types of masses including rare primitive ones have been described in literature. Such masses may either arise in the nasopharynx or arise from neuroectoderm or the nose and paranasal air sinuses and present in the nasopharynx.

The ciliated columnar mucosa of the nasopharynx changes to stratified columnar type below the level of soft palate and in addition contains lymphoid tissue of B cell type, connective tissue and minor salivary gland tissue. Because of the variety of cell types,many different lesions may occur.

MATERIALS AND METHODS

A total of 36511 patients attending the ENT OPD of R. G. Kar Medical College and Hospital, Kolkata during the period of July 1999 to June 2000 were screened for any nasopharyngeal mass. Most of the patients came from North Kolkata and the surrounding districts of West Bengal. There was no patient of Chinese origin. Five percent patients were tribal. As the hospital was a referral centre, a few patients came from very distant areas of West Bengal. Special emphasis was given to the patients presenting with nasal obstruction, mouth breathing, epistaxis, non specific earache or metastatic cervical lymph nodes. Among these patients 30 patients were found having a mass in the nasopharynx.

History recording and full clinical examination of the patients, examination of blood, radiological examination and histopathology of the nasopharyngeal masses were done. Nasal endoscopy was done in all cases. Nature and extent of the masses were seen and staging was done accordingly.

RESULTS AND ANALYSIS

It was found that 0.08% of the patients attending the ENT Department of our hospital had nasopharyngeal mass.

In the present series, the peak incidence of different nasopharyngeal masses was recorded in the age group between 11-20 years (40%) (Table-I).

In the present series, antrochoanal polyp (ACP) was the commonest nasopharyngeal mass (30%). Other common diseases were adenoids (23%), angiofibroma (JNA) (20%) and nasopharyngeal carcinoma (NPC) (13%). Among 30 nasopharyngeal masses 12 (40%) were neoplastic and 18 (60%) were non-neoplastic masses.

In the present series, no cases of nasopharyngeal carcinoma presented exclusively as nasopharyngeal mass. All cases of angiofibroma presented with nasal obstruction and epistaxis (Table II).

In the present series 50% of cases of JNA presented in Stage I (Table III). 75% of the cases of NPC presented in stage III (Table IV).

DISCUSSION

Harrison (1976) suggested that JNA was exclusively a disease of males and that the mean age at presentation was around 14 years. In our study 83% of the cases of JNA were in the age group 11-20 years.

Gutherie (1918) reported 116 cases of choanal polyp. Out of which 102 were under the age of 16 and only 14 of these were under 10 years. Miles Foxen (1971) said that choanal polyp usually occurs during second decade of life. In the present study, 67% of the cases of ACP were in the age group 11-20 years.

C.T. Chew (1987) stated that nasopharyngeal carcinoma was more common in male and the ratio was 2:1.

Jamal MN (1994) stated that the main presenting symptoms of JNA were epistaxis and nasal obstruction. In the present

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Table I : Age Indicence

Age Groups	Number Of Cases [Percentage]							Total
In Year	ACP	JNA	Adenoids	NPC	Embryonal Rhabdomyo Sarcoma	Rhnospori Diosis	Non Hodgkin Lymphoma	Number of Cases [Percentage]
0-10	1(11%)	-	6(86%)	-	1(100%)	-	-	8 (27%)
11-20	6 (67%)	5(83%)	-	-	-	-	-	12(40%)
21-30	2(22%)	1(17%)	-	-	-	-	-	3(10%)
31-40	-	-	-	-	1(50%)	-	1(3%)	
41-50	-	-	-	1(25%)	-	1(50%)	-	2(7%)
51-60	-	-	-	2(50%)	-	-	1(100%)	3(10%)
61 and above	-	-	-	1(25%)	-	-	-	1(3%)
Total	9(30%)	6(20%)	7(24%)	4(13%)	1(3%)	2(7%)	1(3%)	30(100%)

Table II : Presenting symptoms in JNA and NPC

Symptoms	No. of Cases (Percentage)	
	JNA	NPC
Nasal obstruction with Headache /Earache	-	1(25%)
Nasal obstruction with Epistaxis	6 (100%)	2(50%)
Nasal obstruction with neck swelling	-	1(25%)
TOTAL	6(100%)	4(100%)

Table III : Staging of JNA (Chandler)

Stage	Number of Cases	Percentage
Stage I	3	50%
Stage II	Nil	Nil
Stage III	2	33%
Stage IV	1	17%
Total	6	100%

Table IV : Staging of NPC (TNM System)

Stage	Number of Cases	Percentage
Stage 0	0	0
Stage I	1	25%
Stage II	0	0
Stage III	3	75%
Stage IV	0	0
Total	4	100%

study in 100% of the cases of JNA presented with nasal obstruction and epistaxis.

The incidence of lateral extensions of JNA has been reported variously as 20% by Handousa et al. (1954); 18.5% by Mishra and Bhatia (1964); 23.3% by Gupta and Gupta (1971); 53%; by Girgis (1973); 43.74% by S.K.Dey (1986). In our study, 33% of the cases of JNA presented in Stage III (Table III).

Simpson, Robin and Ballantyne (1957) were of the opinion that nasal obstruction was the chief symptom of ACP.

CONCLUSION

Out of 36511 patients attending the ENT OPD of our hospital 0.08% patients had nasopharyngeal mass. 30 cases of nasopharyngeal mass were studied.The peak incidence was in the age group between 11 to 20 years (40%). Commonest nasopharyngeal mass was antrochoanal polyp (30%). 50 percent of the cases of JNA presented in Stage I. 75 percent of the cases of NPC presented in Stage III.

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TYMPANOPLASTY WITH AND WITHOUT CORTICAL MASTOIDECTOMY - A COMPARATIVE STUDY

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ABSTRACT : *Perforation of the tympanic membrane is nature's way of maintaining the middle ear ventilation under the pressure of inflammatory process in the tympanomastoid cleft. An attempt at reconstruction with the possibility of infection lurking in and around the mastoid air cells may seem futile. Now the question arises as to whether a cortical Mastoidectomy is essential before an attempt at reconstruction is made. Our experience with one hundred and twenty patients is presented here. Our study shows that cortical mastoidectomy does not significantly improve the results in well-selected ears.*

Key Words : Cortical mastoidectomy, Tympanoplasty

INTRODUCTION

Tympanoplasty is an operation performed to eradicate disease from the middle ear cleft, and to reconstruct the hearing mechanism with or without tympanic membrane grafting and without mastoid surgery. Perforation of the tympanic membrane is nature's way of maintaining middle ear ventilation under the pressure of inflammatory process in the middle ear cleft. The two opposing demands of tympanoplasty namely, removal of all disease process and at the same time trying to maintain as much of normal tissue as possible to facilitate reconstruction of the hearing mechanism is a demanding task. As long as there is infection lurking in and around the middle ear cleft and mastoid antrum, any attempt at reconstruction may seem futile. In this context cortical mastoidectomy seems to be an integral part of every tympanoplasty. An attempt is made in this study to analyze the role of cortical mastoidectomy in the surgical outcome of tympanoplasty.

MATERIALS AND METHODS

The sample studied consists of one hundred and twenty ears with chronic suppurative otitis media without cholesteatoma subjected to surgical treatment at the department of E.N.T and Head and Neck Surgery of M.S.Ramaiah Medical College, Bangalore during the period of June 1998 to July 1999. Ears with cholesteatoma and ears with a previous history of mastoid surgery were excluded. All patients with discharging ears were managed conservatively and were taken up for surgery once they became dry. The sample of 120 was divided into DRY ears (ears which remained dry for a period of six months prior to surgery) and QUIESCENT ears (ears which remained dry for one month pre-operatively). The total number of dry ears included in the study was 76 and quiescent ears 44.

Both dry and quiescent ears were divided into two groups, GROUP 1 (patients who underwent Tympanoplasty alone) and GROUP 2 (patients who underwent Tympanoplasty with cortical Mastoidectomy). In the ensuing discussion these two groups will be mentioned as GROUP 1 and GROUP 2 respectively. The patients were assigned to each group randomly. GROUP 1 consists of 44 patients of which 36 ears were dry & 8 were quiescent. In GROUP 2 a total of 76 cases were analysed of which 40 were dry and 36 were quiescent. All patients underwent surgery by post aural approach. Temporalis fascia graft was used for repair of tympanic membrane perforation and sculpted autologous

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